#3 2621

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of: Attorney Docket No.: 2806.03US02

Retterath et al.

Application No.: 09/928,218 Examiner: Not Assigned

Filed: August 10, 2001 Group Art Unit: 2621

For: SYSTEM FOR ROAD SIGN SHEETING CLASSIFICATION

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

Pursuant to 37 C.F.R. § 1.56, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached Form PTO-1449. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is being filed within three months of the U.S. filing date. No certification or fee is required.

The Examiner's attention is directed to co-pending U.S. Patent Application Nos. 09/772,991, filed January 29, 2001, 09/812,753, filed March 20, 2001, and 09/883,816, filed June 18, 2001, all of which are continuation applications of U.S. Patent No. 6,266,442, as noted in the Related Application section of the applications, and which are directed to related subject

matter. The Examiner is respectfully requested to consider the cited applications and the art cited therein during examination.

Respectfully submitted,

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Please grant any extension of time necessary for entry; charge any fee due to Deposit Account No. 16-0631.

CERTIFICATE OF MAILING

I hereby certify that this document is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 on

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FORM PTO-1449 MODIFIED	Docket No.: 2806.03US02	Application No.: 09/928,218
INFORMATION DISCLOSURE CITATION IN AN APPLICATION	APPLICANT: Retterath et al. FILING DATE: August 10, 2001 GROUP ART UNIT: 2621	

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	5,392,365	Feb. 1995	Steinkirchner			
	5,448,484	Sep. 1995	Bullock et al.			
	5,465,115	Nov. 1995	Conrad et al.			
	5,465,308	Nov. 1995	Hutcheson et al.			
	5,627,915	May 1997	Rosser et al.			
	5,633,944	May 1997	Guibert et al.			
	5,633,946	May 1997	Lachinski et al.			
	5,699,444	Dec. 1997	Palm			
	5,740,274	Apr. 1998	Ono et al.			
	5,790,691	Aug. 1998	Narayanswamy et al.			
	5,844,699	Dec. 1998	Usami et al.			
	5,864,630	Jan. 1999	Cosatto et al.			
	5,974,521	Oct. 1999	Akerib			
	5,991,085	Nov. 1999	Rallison			
	6,064,768	May 2000	Hajj et al.			
	6,141,433	Oct. 2000	Moed et al.			
	6,212,480	Apr. 2001	Dunne			
	6,266,442	Jul. 2001	Laumeyer et al.			

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)

	Landmark Recognition using Projection Learning for Mobile Robot Navigation, Ren C. Luo, Harsh Potlapalli, Center for Robotics and Intelligent Machines, IEEE World Congress on Computational Intelligence, Vol. IV, pgs. 2703-2708, June 1994.
	A Real-Time Traffic Sign Recognition System, S. Estable, J. Schick, F. Stein, R. Janssen, R. Ott, W. Ritter, Y.-J. Zheng, Daimler-Benz Research Center, Proceedings of the Intelligent Vehicles '94 Symposium, Paris, France, pgs. 213- 218, October 1994.
	Recognition of Traffic Signs by Artificial Neural Network, D. Ghica, S. Lu, X. Yuan, Dept. of Computer Science Memorial University of Newfoundland, IEEE, pgs. 1444-1449, March 1995.
	Realtime Traffic Sign Recognition (TSR), Jens Logemann, Ed., Univeritat Koblenz - Landau, 3 pgs., November 1997.
	Registering Multiple Cartographic Models with the Hierarchical Mixture of Experts Algorithm, Simon Moss and Edwin R. Hancock, Dept. of Computer Science, University of New York, IEEE, pgs. 909-914, 1997.
	Multi-Modal Tracking of Faces for Video Communications, James L. Crowley and Francois Berard, GRAVIR - IMAG, I.N.P. Grenoble, Grenoble, France, IEEE, pgs. 640-645, 1997.
	Road Traffic Sign Detection and Classification, A. Escalera, L. Moreno, M. Salichs, J. Armingol, IEEE Transactions on Industrial Electronics, Vol. 44, No. 6, pgs. 848-859, December 1997.

EXAMINER SIGNATURE	DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

FORM PTO-1449 MODIFIED **INFORMATION DISCLOSURE CITATION IN AN APPLICATION**	Docket No.: 2806.03US02	Application No.: 09/928,218
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OTHER DOCUMENTS

Examiner Initials	(Author, Title, Date, Pertinent Pages, etc.)
	Dominant Color Transform and Circular Pattern Vector for Traffic Sign Detection and Recognition, Jung Hak and Tae Young Choi, IEICE Transaction Fundamentals, Vol. E81-A, No. 6, pgs. 1128-1135, June 1998.
	A Trainable Pedestrian Detection System, C. Papageorgiou, T. Evgenious, T. Poggio, Center for Biological And Computational Learning and Artificial Intelligence Laboratory, MIT, IEEE International Conference on Intelligent Vehicles, pgs. 241-246, 1998.
	Robust Lane Recognition Embedded in a Real-Time Driver Assistance System, R. Risack, P. Klausmann, W. Krüger, W. Enkelmann, Fraunhofer-Institut für Informations, Karlsruhe, Germany, IEEE International Conference on Intelligent Vehicles, pgs. 35-40, 1998.
	A Texture-based Object Detection and an Adaptive Model-based Classification, T. Kalinke, C. Tzomakas, W. Seelen, Institut für Neuroinformatik, Bochum, Germany, IEEE International Conference on Intelligent Vehicles, pgs. 143-148, 1998.
	Internet Printout: *The Road Sign Recognition System - RS^2*, Faculty of Transportation Sciences, Prague, Czech Republic, 7 pgs., c. approximately 1999.
	Internet Printout: *The Chamfer System*, 4 pgs., c. approximately 1999.
	Real-Time Object Recognition: Hierarchical Image Matching in a Parallel Virtual Machine Environment, J. You, P. Bhattacharya, S. Hungenahally, School of Computing and Information Technology, Griffith University, Brisbane, Australia, Dept. of Computer Engineering, University of Nebraska, Lincoln, Nebraska, 3 pgs., undated.
	An Architecture of Object Recognition System for Various Images Based on Multi-Agent, Keiji Yanai, Koichiro Deguchi, Dept. of Computer Science, University of Electro-Communications, Tokyo, Japan, and Dept. of Mathematical Engineering and Information Physics, University of Tokyo, Tokyo, Japan, 4 pgs., undated.
	Multi-Feature Matching Algorithm for Free-Form 3D Surface Registration, C. Schütz, T. Jost, H, Hügli, Institute for Microtechnology, Neuchatel, Switzerland, 3 pgs., undated.
	Representation of Uncertainty in Spatial Target Tracking, Tim Baker, Malcolm Strens, DERA Farnborough, United Kingdom, 4 pgs., undated.
	Using Centroid Covariance in Target Recognition, Gang Liu and Robert M. Haralick, Dept. of Electrical Engineering, University of Washington, Seattle, Washington, 4 pgs., undated.
	Using Spatial Sorting and Ranking in Model Based Object Recognition, G. Hjaltason, M. Ray, H. Samet, I. Weiss, Computer Science Dept. University of Maryland, College Park, Maryland, 3 pgs., undated.
	Surveillance Systems for Terrestrial Transport Safety and Improved User Information Capability, C. Nwagboso, C. Regazzoni, M. Renard, E. Stringa, Bolton Institute, Bolton, United Kingdom, Dept. of Biophysical & Electronic Engineering, Genova, Italy, Vigitec, Brussels, Belgium, pgs. 1-7, undated.

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OTHER DOCUMENTS

Examiner Initials	(Author, Title, Date, Pertinent Pages, etc.)
	Illumination Invariant Image Indexing Using Moments and Wavelets, Mandal, Journal of Electronic Imaging, Vol. 7 (2), pp. 282-293, April 1998.
	Feature Integration and Relevancy Feedback Analysis in Image Similarity Evaluation, Celentano, Journal of Electronic Imaging, Vol 7 (2), pp. 308-317, April 1998.
	Auto-associative Segmentation for Real-Time Object Recognition in Realistic Outdoor Images, Leonardo Estevez and Nasser Kehtarnavaz, Dept. of Electricial Engineering, Texas A&M University, Journal of Electronic Imaging, Vol. 72, pgs. 378-385, April 1998.

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